

Brazilian Jiu Jitsu & Mental Resilience

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Abstract

Since the later eighteenth century, the United States Army began to put a large emphasis on soldiers' physical fitness scores as an indicator of operational readiness. In the early 2000s, the United States Army began looking at operational readiness with a focus on mental wellness termed resilience. Following twin pandemics, the term resilience has become a buzzword in not just soldiers' lives but everyday citizens of the United States. According to the U.S. Army, the six trainable resilience competencies are self-awareness, self-regulation, optimism, mental agility, strengths of character and connection. This study examines the martial art of Brazilian Jiu-Jitsu and its ability to build the six core competencies of resilience as well as increase physical fitness through those that participate in the practice. Brazilian Jiu Jitsu Black belt professors and participants were interviewed and given the Army's definition of each core competency and asked whether the martial art contributed to everyday resilience.

Keywords: Resilience, Brazilian Jiu Jitsu, Self-awareness, self-regulation, optimism, mental agility, strengths of character, connection, therapeutic recreation

Acknowledgements

“Remember – No Man is a failure who has friends”

- Clarence the Angel, *It's a Wonderful Life*

Yes, I Am that guy who just quoted a 1946 black and white film in my doctoral dissertation. The fact is this dissertation is not possible without the other great people around me pushing me toward the finish line. I feel like I blinked when this three-year program very quickly turned into a five-year program. The subject matter seemed very fitting as all the obstacles life threw at me, very much tested my own personal resilience. The real measure of resilience is through those that stuck by me and helped me grind it out. To my committee, you all are phenomenal researchers, professionals, and most importantly some of the best damn people I've ever got to work with. To the few members of my cohort that had already finished school and still continuously reached out to me and offered support along the way, you will always have a special place in my heart. To the participants in the study, without your volunteering to be a part of the study, this paper does not get written. To my friends that encouraged me through good times and bad times; from sleeping on couches, laughing at my dumb jokes, and reminding me that I am never alone, you are all a big part of why I can achieve great measures in life. Lastly, to my family, for constantly reminding me I would be the first doctoral graduate in the family, I hope I made you proud. Love you all, it has been a complete honor to have you all in my life.

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Brazilian Jiu Jitsu & Mental Resilience

Chapter 1: Introduction

The practice of physical exercise promotes beneficial effects not only for the cardiorespiratory and muscular system but also for behavioral function and mental health (da Gama et al., 2018). Scientific studies have shown that physical exercise voluntarily, at moderate intensities, with pleasurable activities, improves mood, cognition, anxiety and quality of life in healthy individuals. One factor that may be associated with this better behavioral response in athletes is the resilient profile. Resilience is a personal ability to successfully adapt to acute or chronic stress. Authors claim that resilient subjects have greater mood control, behavior, cognition, and greater coping characteristics, such as solving, solving problems, and facing their fears. "Oh, you are having a rough day... You should be more resilient!" Resilience is a term that seems to be thrown around often to depict a life of mental toughness, grit, or stability. Resilience can be described as a bounce back from adversity, trauma, or being a part of a post-disaster community. It seems as if much of the research focuses on negative atmospheres and climate to develop resilience. Due to this general negative direction, I have not found any research contributing to positive atmospheres developing resilience.

For the past eight years as a civilian Army Contractor, I have been trained and instructed skills in sports psychology and resilience to United States Army Service members. As an athlete, I wanted something to still be physically competitive in as I get older in my age. For the past five years I have been practicing the martial art of Brazilian Jiu-jitsu. As a participant in the martial art, it has been noteworthy to observe a parallel in the results achieved in Brazilian Jiu-jitsu to the results I am trying to achieve as an instructor with a soldier population.

“The Principles of Jiu Jitsu can be applied to every endeavor in life. You have stay calm when you are in bad situations. You need to cover and conceal your intent with other maneuvers. You need to utilize the simplest and most efficient methods. You need to prioritize your focus of effort. You need to train until you trust yourself to move intuitively, without having to think. You need to move at the right time. You have to defend critical areas. You should not attack your enemy’s strongpoints. You must utilize leverage. You cannot let your emotions drive your decisions. You have to establish a good base foundation to build upon. You cannot be overly aggressive, but you can’t just allow things to happen. When you make a move, you have to believe in what you are doing. You have to be mentally strong. You have to keep an open mind”

–Rickson Gracie, Brazilian Jiu-jitsu blackbelt (Gracie, 2021, p. 6)

This study aims to examine the relationship between goal achievement for the Army's resilience program and the experiences of Brazilian Jiu-jitsu athletes. The study also examines Brazilian Jiu-jitsu as a potential positive atmosphere to develop resilience.

Definition of key terms

Brazilian Jiu-jitsu

Brazilian Jiu-Jitsu is a form of judo and traditional Japanese jiu-jitsu that is mostly practiced on the ground with the aim of strangling or articulating the opponent into submission (Mickelsson, 2021). Kicks, punches, elbows, knees, and headbutts are examples of voluntary blows that are not allowed in formal practice. Brazilian Jiu-Jitsu is a contemporary martial art that derives its core from technique, time, and leverage rather than brute force, making it easier to dominate opponents who are more imposing in size. It is often referred to as "the human chess game." A Brazilian Jiu-Jitsu fighter is called a jujitsuka. He practices his art wearing a jujitsu gi (pronounced "gui"). Like its ancestor Judo, Brazilian Jiu-Jitsu has many similarities, and

someone unfamiliar with it could easily confuse them (Gonçalves & de Magalhães Neto, 2019).

In both cases, we find Takedowns, Immobilizations on the ground, articulation keys, and an absence of percussion (punches, feet, etc.).

Resilience

Resilience is understood as the human capacity to assume extreme situations and overcome them flexibly. Resiliency is often defined as the ability to bounce back from challenging life situations (Miceli et al., 2021). Resilience is not like a trampoline, where one minute down and the next up. It's more like trying to scale a mountain without a map. It takes effort, perseverance, and support from others. No less distress, grief, or anxiety is felt by those who are resilient than by others. They simply employ healthy coping mechanisms to manage such challenges in ways that promote strength and growth, frequently emerging from the experience stronger than they were. People who are resilient frequently possess a variety of traits that aid them in overcoming obstacles in life. Resilient individuals see themselves as survivors. They are aware that they can persevere through challenging situations even if they arise (Cinner & Barnes, 2019). The capacity to control one's emotions in the face of stress is a sign of resilience. This is not to say that those who are resilient don't feel intense emotions like fear, grief, or rage. It indicates that they understand those emotions are fleeting and can be controlled till they pass. People that are resilient typically have strong internal loci of control and believe that their choices can influence how things turn out. Since all these skills require practice, the training of the Army in this regard is of utmost importance.

Statement of the problem

Resilience has been shown to protect against depression and facilitate better adjustment and adaptation, and specific resilience programs show positive long-term effects. There is a gap in the research indicating a lack of positive atmospheres or positive climates to develop resilience. Psychological resilience has been studied in a variety of contexts, including inmate populations, post-disaster communities, traumatic households, toxic workplace environments, and military personnel. However, practical techniques from a multitude of martial arts, including Judo, Brazilian Jiu-Jitsu, Muay Thai, Taekwondo, boxing, and karate, have not been considered in depth (Collura, 2018). Strength and conditioning are the mainstays of most of the training that takes place with cadets in the physical education department program. Programming and classes include Olympic weightlifting, aerobic power intervals, and ruck steps. Mental toughness and resilience are requirements and assets in the military. Thus, willingly participating in Brazilian *Jujitsu is examined as a positive climate vis-à-vis army.*

Purpose & Research Question

1. What is the relationship between the United Army's resilience program and Brazilian Jiu-jitsu goal achievement?
2. How can an individual develop and learn resilience without experiencing trauma?

Study Rationale

- Further Understanding Resilience in multiple Environments
- Exploring Coach-Athlete Relationships
- Furthering Research for Army Combatives Program as well as the Ready and Resilient Campaign.

Positionality Statement

I am a 34-year-old white, middle class, cisgender, heterosexual, male. I am healthy and able-bodied. I am physically active and have two degrees relating to physical and mental wellness. My individual character shapes my behavior and experiences.

Growing up I lived an ideal family life in an Americanized society full of unconditional love, active support, and safety. Being White I have systematically attributed unearned powers and privileges that I was not aware of growing up. I grew up on the East Coast outside of Boston, Massachusetts. The past seven years I have spent time in Hawaii as well as the Pacific Northwest working nearby Army installations as a contractor. I have multi-generational roots in Ireland. I grew up in a household as the youngest child of a mother and father, with one older sister, and one older brother. I am the first in my family to try to attain a doctorate degree. We grew up middle class and I never worried about things like food on the table or being evicted from our home. I was also raised catholic and do consider myself a spiritual person.

I was raised by family values to be what was described as a “strong man” in our household. Growing up with showing little emotion and always trying to stay composed has guided me into many of my research interests today. I began suffering from anxiety attacks at age 15 and found physical activity to be my guiding savior in dealing with my own mental health issues. As much as I considered and described my childhood as ideal, I found that mental health was something in my family that had been swept under the rug for years. It was very much never socialized and any problem I may have been dealing with was not “as strong” as the issues my family had in the past. I studied sport psychology so that I could promote physical activity, and well-being to those that may suffer much like I did in silence, as an ability to cope with mental health issues. Throughout

my research interests I decided to investigate mental health, psychology of emotional behavior, and masculinity.

I have a background in holding an undergraduate degree in physical education/exercise science. Traditionally the curriculum focused on physicality with little emphasis on mental or social benefits. I can personally identify with this which causes some bias. As stated, I have found benefits gained personally through exercise socially and mentally, led me onto study my master's degree in sport/exercise psychology. This curriculum adjusted the focus to the brain, however removed almost all-physical exercise. A "wait until it breaks" mentality seemed to be evident with very little research in preventative methods. The focus of my studies has now shifted to identify research supporting my personal experience. The goal is to find research behind physical activity that bridges the gap beyond just physical health and is more applicable at addressing leader development through sport. One way of identifying these benefits of physical activity that reach beyond just physical health is researching community and leader development through sport and physical activity. Considering these limitations in the literature and my positionality as a researcher, I plan to conduct a qualitative research study on developing resilience through BJJ.

Chapter II: Review of Literature

This section will describe the framework used in this study: Army Resilience and each of its core competencies. Within the core competencies are multiple theoretical frameworks included from positive psychology research. I will begin by describing several key concepts of Army Resilience. Then, I will review the literature on Brazilian Jiu-jitsu and its impact on participants. Resilience can be conceptualized either as a result or response to stress or as a process that mediates between the response to stress and trauma. The phenomenon of resilience, common among people who face traumatic experiences, arises from normal adaptive functions and processes of the human being. Resilience is the result of a dynamic and evolutionary process that varies according to the circumstances, the nature of the trauma, the context, and the stage of life; in addition, it can be learned, developed, or perfect (Collura, 2018). Resilience has been shown to protect against depression and facilitate better adjustment and adaptation, and specific resilience programs show positive long-term effects. Resilience occupies a relevant place in armies of all times. Traditionally, universal military psychological prevention strategies have been personnel selection, screening, training, cohesion, and leadership, but none of them included contributions from the area of mental health. Regardless of their good results on many occasions, these strategies have never been empirically tested. However, currently, approaches to this concept are increasingly based on evidence.

Army Resilience

Since the later eighteenth century, the United States Army began to emphasize soldiers' physical fitness as an indicator of operational readiness. In the 1920s, the United States Army began assessing soldiers on requirements evolving around physical training (P.T.) standards that

must be met for a service member to be a part of the community successfully. The first field manual dates to 1919 by Colonel William Waldron. Colonel Waldron credited P.T. as building four different dimensions: general health and body vigor, muscle strength and endurance, self-reliance, smartness, activity, and precision (Waldron, 1919).

After years of incorporating P.T. and establishing standards for what defined a fit servicemember in the Army, the standards were continuously adjusted into testing material. P.T. became a test titled the Army Physical Fitness Test (APFT) that soldiers must complete twice a year, constantly evolving. In 2009, the Army began shifting the focus of readiness to include mental well-being with a term identified as *resilience*. Since the beginning of its creation, the Army has always taught us, soldiers, to be physically fit however, incorporating resilience into the Army teaches new skills in the human mind. The resilience program is the largest psychological program in the Army's history and is intended to be taught to the entire soldier population (Bowser, 2011).

The Army definition of resilience is the ability to grow and thrive in the face of challenges and bounce back from adversity" (Reivich, Seligman, and Mcbride 2011). The career of an enlisted service member ranks as one of the most stressful jobs in America (Blain, 2019); the U.S. Bureau of Labor Statistics gathers data every year to formulate the rankings. For some, military life may be easy, but for others, having to be away from Family, deployments, or moving every few years can take a toll on their mental well-being. The creation of the Army's Master Resiliency-Training (MRT) program provides Soldiers with various skills to cope with the daily stressors of life in the military. The MRT program takes aspects of the PRP Penn Resilience Program (PRP) and positive psychology created by Martin Seligman (Reivich,

Seligman, and McBride 2011). Seligman is known as the father of positive psychology and believes people can live more positive lives by better processing negative thoughts. Seligman's theories are the basis of the Army resilience program (Bowser, 2009).

The United States Master Resilience Trainer Course (MRT-C) is comprised of three different curriculums throughout the entirety of the ten-day course. The first concept presented to students derives from The University of Pennsylvania's Positive Psychology Center and is based on the PRP curriculum. The next portion of the program focused on performance enhancement and was developed by a sports psychologist at the United States Military Academy at West Point. The last curriculum focuses on sustaining mental health in deployment situations, developed by the Walter Reed Army Institute of Research (Reivich, Seligman, McBride, 2011). The course is currently taught at Ready and Resilient Performance Centers by civilian contractors with Master's level or above degrees in sports and performance psychology-related fields. The instructors of the course teach 14 skills and six major competencies that build the theoretical framework of resilience.

Core competency 1: Self-Awareness

The MRT curriculum binder describes self-awareness as "the ability to identify your thoughts, emotions, behaviors and physiology, particularly counterproductive patterns, remaining open and curious (Reivich et al., 2011, p.37). Within the core competencies of self-awareness, there are two different skills: ATC and Icebergs. Each skill receives its own module.

ATC

The skill of ATC is derived from Albert Ellis and the ABC model from Cognitive Behavioral Therapy (CBT) (Reivich et al., 2011). When instructed to soldiers, the skill begins by having individuals identify the **A** of the model for activating events. An activating event is referred to as a trigger and is just the facts (who, what, where, and when), leaving out any interpretation (why). An activating event is anything that triggers the next part of the model, the **T** for thoughts (Reivich et al. 2011). Ellis's ABC model referred to thoughts as beliefs (**B**) (Lazarus, 1982). The final step of the ATC model to help gain self-awareness is identifying what consequences. Referred to as emotions and reactions were driven by an individual's thoughts. Emotions are how an individual feels from a thought, and a reaction is what they do (Lazarus, 1982; Reivich et al., 2011).

Lazarus (1982) challenged traditional psychology stating emotion is driven by cognitive mediation. The ATC model is a foundational skill to the MRT program because it enables an individual to become self-aware of the thinking process; therefore, as mentioned before by Seligman, allowing for that individual to challenge whether they want to think about the activating event as a positive or negative. This, however, can be a challenge as positive emotions are far fewer than negative emotions; typically, the ratio is for every 1 positive, there are 3 to 4 negative emotions (Fredrickson, 1998). The broaden and build theory proposes that being able to think in a positive manner helps to build your mental and physical resources. This proactive approach allows for reserves as the positive emotions grow within an individual; it is more likely the positive benefits will reap in times of challenges and adversities. Using the broaden and build theory, Fredrickson suggests positive emotions such as joy, interest, contentment, and love can have an *undoing effect* on the negative emotions of stress and anxiety (Fredrickson, 1998).

Icebergs

The skill of Icebergs comes from Beck's *cognitive therapy and emotional disorders* (1976). The theory goes beyond the initial thought process described in Ellis's ABC model and examines emotions and reactions being influenced by an individual's core beliefs (Revich et al., 2011; Fenn, 2013). Beck (1976) outlined understanding thoughts and behavior through three processes: core beliefs, dysfunctional assumptions, and negative automatic thoughts (Fenn, 2013). The MRT program encourages soldiers to work through this skill by using a psychology technique of Socratic questioning. This technique helps to uncover the deep origins of core beliefs and why thoughts, emotions, and behaviors occur (Beck, 2005, 2015).

Self-Regulation

The MRT curriculum binder describes self-regulation as "the ability to regulate impulses, emotions, and behaviors in order to achieve goals, expressing emotions appropriately and stopping counterproductive thinking" (Revich et al., 2011, p. 23). Within the core competency of self-regulation, there are three different skills: Goal setting, energy management, and mental games. Notably, it is known that in the past, in its historical context, expressions such as physical education, physical culture, sports training, physical exercise, physical activity, sport, and gymnastics were used many times, indicating the same activity (Toychievich, 2022).

Goal setting

The skill of goal setting, specifically in the MRT program, is a 7-step process to help soldiers set implementation techniques to help grow, thrive, and enhance performance (Revich, 2011; Locke & Latham, 1990). The MRT program's curriculum uses a combination of goal-

setting theories stemming from sports psychology research. The main principles are Locke and Latham's five principles of goal setting (1990) and Deci and Ryan's self-determination theory (2000).

Locke and Latham's five principles consist of clarity, challenge, commitment, feedback, and task complexity. The MRT program focuses on clarity by having soldiers write out their goals as detailed as possible, being specific, measurable, action-focused, realistic and timebound (SMART). Soldiers are also challenging themselves by reflecting on goals that push an individual outside their comfort zone and months or years down the road. The concept of commitment is used by encouraging soldiers to set a completion suspense date, check-in dates, share the goal with someone meaningful, and mimicking their surroundings to remind themselves of the goal. Feedback is utilized by working with a partner and discussing obstacles and ways to sustain or improve behaviors throughout the goal. The last principle, task complexity, can be seen throughout the 7-step process by reassessing the goal, re-ensuring motivation, and re-tooling the goal to accommodate an individual's life (Revich, 2011; Locke & Latham, 1990).

Ryan & Deci (2002) research social environments and their influence on an individual's motivation for growth and behaviors. Self-determination theory states that humans have three basic psychological needs; autonomy, competence, and relatedness (Ryan & Deci, 2002). If these needs can be met, the experience can then provide for a positive outcome and ideal functioning. Autonomy is the process in which individuals feel as if they have a choice and are empowered in decision-making processes. This feeling of choice also gives the individual the perception that their actions align with their own core values/beliefs. Ryan & Deci (2002) theorize that core

values and beliefs are the greatest motivators of taking action. The need for competence comes from a feeling of accomplishment of putting in extra effort to achieve mastery. This is related to tasks that an individual can get better at through persistence (Ryan & Deci, 2002). Relatedness is the need referring to a sense of belonging and cohesiveness within a team that creates shared experiences (Ryan & Deci, 2002). In the MRT program, soldiers are encouraged during the Goal-setting module to select values that keep consistent motivation and influence daily behavior when acting upon their goals. This source of motivation allows for greater commitment (Revich, 2011).

Energy Management

The skill of energy management instructs soldiers on techniques to impact the amount of energy to benefit performance in personal and professional situations. In a stressful situation, the skill allows for greater control over an individual's thought process, therefore indicating more regulation over emotions and reactions (Revich et al., 2011). The research contributing to the energy management module comes from the inverted-u model and deliberate breathing (Hanin, 2004; McCarty, 2015). The skill taught to soldiers is a technique titled diaphragmatic breathing, which comes from yoga and other spiritual influences. The breathing technique teaches soldiers to create a relaxation response in situations in which an individual's physiology might be higher or lower than the energy requirements that meet a task.

Mental Games

To lower performance anxiety and increase performance satisfaction, mental games are implemented in the MRT curriculum as distraction techniques (Corah, 1998). The curriculum

uses mental games as a self-talk skill to lower anxiety, create calmness, and increase positivity (Corah, 1998). Examples of mental games are working through the alphabet backward, reciting positive lyrics, and using positive imagery.

Optimism

The MRT curriculum binder describes optimism as "the ability to hunt for what is good while remaining realistic, maintain hope and confidence, and fighting the negativity bias; focusing on what is controllable as opposed to what is not controllable; have faith in self and team" (Revich et al., 2011 p. 23). Within the core competency of optimism is three different skills: Hunt the good stuff, put it in perspective, and real-time resilience. Put it in perspective is all about getting of a thinking style title catastrophizing. This is when thoughts either travel into a downward spiral of negativity, scatter all over the place, or a circling around a single negative rumination. Real time resilience is similar but more of a self-talk skill in which counterproductive thoughts are spoken back to with an internal dialogue using affirmations (Revich, 2011).

Mental Agility

The MRT curriculum binder describes "mental agility as the ability to take other perspectives and think FAT (flexibly, accurately, and thoroughly) about situations; the willingness to try new strategies when current ones aren't working (Revich et al., 2011). Metal Agility is often taught using the acronym F.A.T. In doing so, mental agility helps to aid in thinking flexibly, accurately, and thoroughly.

Strengths of Character

The MRT curriculum binder describes strengths of character as knowing your top Character Strengths and how to use them, identifying and cultivating the Character Strengths in others. The values in action survey created by UPENN is utilized in this portion of the course. This allows for self-awareness to be created around what an individual is doing well and how they can bring that more fully to the table (Revich et al. 2011).

Connection

Connection is described as “Creating strong relationships; communicating positively and effectively; developing empathy and being willing to give help and seek help (Revich et al., p. 23, 2011). Connection ensures that individuals recognize a community aspect within their self-development. Essentially that other people around us help build our resilience.

History & Americanization of Brazilian Jiu Jitsu

Brazilian Jiu Jitsu is a martial art, a sport, and a discipline of self-defense practiced by millions of followers worldwide. A Brazilian jujitsu fighter is called a jujitsuka. He practices his art dressed in a jujitsu gi (pronounced “gui”) wrongly called a kimono, although this has passed into common parlance. Like its ancestor judo, Brazilian jujitsu has many similarities and someone unfamiliar with it could easily confuse them. In both cases, we find takedowns, fixed assets on the ground, articulation keys, and an absence of percussion (punches, feet, etc.). Brazilian Jiu-Jitsu, BJJ, Gracie Jiu-Jitsu, or Ne-Waza (part of Judo devoted to the ground) was developed in Brazil more than a century ago of traditional Japanese Ju-Jitsu (which means the art of flexibility).

BJJ then became very popular thanks to the victories of Brazilian Jiu Jitsu (jiu-jitsuka) practitioner during the first fights of the UFC (the largest organization of MMA: Mixed Martial Arts or formerly Free-Fight). Focus on this martial art which has become a national sport in Brazil alongside football and capoeira (Cairus, 2012).

History of Brazilian Jiu Jitsu

Brazilian Jiu Jitsu, like most modern martial arts, is relatively new. While other martial arts make big claims about being thousands of years old, BJJ can trace his lineage just beyond living memory, coming to Jigoro Kano, the founder of Judo. Kano was born in a transitional period in Japan, where the Japanese shogunate had lost power, and there was an increase in centralized imperial power. This has led to a rapid decline in martial arts knowledge as their usefulness declined in this post-feudal era. Kano, a teacher, and lover of history, traveled around Japan, trying to gather and preserve the knowledge of these ancient arts that were soon forgotten. His goal was not to create a fighting system but a physical education program for children. She believed martial arts could instill virtues that typical fitness and sports would otherwise be incapable of.

The history of Brazilian jujitsu dates to the early 1900s. In 1904, Jigoro Kano, the founder of Judo , asked one of his disciples, Mitsuo Maeda, to go to the United States to promote the new martial art on the American continent. After spending a few years in the United States, Mitsuo Maeda settled in Belém in Brazil. Moreover, he actively participated in establishing the Japanese community in the country. After several passages in Europe, Central America, and Brazil, Maeda settled permanently in the latter in 1917. At this time, he taught jiu-jitsu (this was

what judo was called at that time) to Carlos Gracie, son of Gastao Gracie, to thank this influential businessman for having him help establish themselves.

After several years of learning, Carlos Gracie creates a school of jiu-jitsu and, in turn, teaches it to his brothers except for Helio Gracie, who had to be content to watch them and listen to the teaching because of his fragile composition. . When he was 16, a student came to Hélio in the absence of his brother Carlos. So, he proposed to start the lesson using the techniques he had memorized. Helio thus begins jiu-jitsu and gradually modifies each technique to adapt it to his frail physique (1m65 and 64kg), favoring technique, timing, and leverage over brute force. This is the birth of Brazilian Jiu-jitsu (Cairus, 2012).

During his stay in Belém, he participated in the free wrestling matches (vale tudo or Luta livre) organized in the city. He established himself as a formidable fighter, thus demonstrating the effectiveness of Japanese martial arts. Mitsuo Maeda then opened a school to teach Judo Jujitsu. One of his students was Carlos Gracie, son of Gastão Gracie, an influential politician who helped him settle in Brazil. Mitsuo Maeda taught Carlos Gracie all the techniques of Ju Jitsu, even those reserved for the elite Japanese fighters. Carlos Gracie began adding new techniques to what is now called Jiu Jitsu and opened his school in 1925. He then taught his brothers the techniques he learned from Mitsuo Maeda and those he was able to develop (Reusing, 2014).

Helio Gracie challenged fighters of different styles without distinction of weight with brio to establish the superiority of Brazilian Jujitsu and perfect it. For his first fight, he faced a professional boxer in 1932 whom he submitted by strangulation in 30 seconds. He also fights against Wladek Zbysko, former world wrestling champion. While the Polish wrestler weighed

almost twice as heavy as Helio, the fight ended in a draw. His notoriety extended to Japan and after beating several renowned judokas including the Japanese number 2, the undisputed judo champion, Masahiko Kimura, decided to avenge his peers. Although Kimura was largely victorious, he was nonetheless impressed with Helio and even offered to teach his knowledge at the Imperial Academy of Japan.

Brazilian jiu-jitsu neutralizes your opponent without giving him the slightest blow by focusing on the ground fight. The goal is to allow a person to win a fight regardless of size or weight using specific techniques. In a way, it's a martial art designed for the weak to defeat the strong! To do this, BJJ focuses on the development of tactical intelligence, the proper management of emotions, the mastery of breathing, and the proper use of mental and muscular energy (Roza, 2012).

The BJJ adept must start the fight as calmly as possible and know how to position his legs and arms on the right support points. He must manage his energy well during combat and constantly rethink his combat strategy. The objective is to take advantage of the opponent's agitation and mistakes to defeat him. It is important to note that training in Brazilian Jiu Jitsu requires practicing the techniques with another person. Unlike some martial arts such as Muay Thai or karate, BJJ does not include shadow boxing or kata.

Yet it was Helio Gracie, Carlos's younger brother who revolutionized this martial art and gave it the form it has today. Indeed, Helio had to adapt his fighting technique to compensate for his weak constitution (height of 1.60 m for a mass of about 65 kg), especially in front of large fighters. He is also considered one of the greatest masters in Brazil and one of the founders of

Brazilian Jiu Jitsu. It is finally thanks to the Gracie family that BJJ was able to be developed and popularized in Brazil and worldwide (Gonçalves, 2019).

Brazilian Jiu Jitsu: The UFC Era and Mixed Martial Arts

It was Rorion Gracie, Helio's eldest son, who blew up Gracie Jiu-Jitsu in the eyes of the world by co-founding the Ultimate Fighting Championship (UFC). In 1993, he organized a meeting where champions of several combat sports and martial arts met to see which sport was the most effective. His brother Royce thus won several editions of the UFC at the beginning before the BJJ was implemented in the training of fighters and to promote Brazilian Jiu-Jitsu, Helio's son, Lorion Gracie, created the famous Ultimate Fighting Championship. Before becoming a regulated competition (time limit, weight class, anti-doping test, etc.), the UFC was originally considered close to real fights, and tournaments of all styles. Find the best fighter. Surrounded by champions in martial arts (boxing, karate, kickboxing, etc.), Helio's son and representative of Brazilian jiu-jitsu Royce Gracie is an outsider in his first opus. However, he eventually won the tournament and announced the arrival of Brazilian Jiu-Jitsu.

Royce will also win the 2nd and 4th editions. Brazilian jiu-jitsu, a martial art little known in the US, begins. And with the victory of Royce in the 2nd and 4th UFC tournaments, the popularity of Brazilian Jiu-Jitsu will continue to grow. In addition to demonstrating the superiority of Brazilian Jiu-Jitsu over other martial arts, the UFC and Royce Gracie revolutionized the practice of mixed martial arts by introducing ground fighting. Today, all fighters in the UFC and other freestyle competitions are followers of Brazilian Jiu-Jitsu. Brazilian Jiu-Jitsu is also the most representative martial art among contemporary MMA athletes. The UFC and Royce Gracie revolutionized the practice of mixed martial arts by

introducing ground fighting. Today, all fighters in the UFC and other freestyle competitions are followers of Brazilian Jiu-Jitsu. Brazilian Jiu-Jitsu is also the most representative martial art among contemporary MMA athletes. The UFC and Royce Gracie revolutionized the practice of mixed martial arts by introducing ground fighting. Today, all fighters in the UFC and other freestyle competitions are followers of Brazilian Jiu-Jitsu. Brazilian Jiu-Jitsu is also the most representative martial art among contemporary MMA athletes.

To everyone's surprise, the BJJ adept called Gracie Jiu-Jitsu at the time was able to impose himself in front of renowned fighters including judokas, wrestlers, boxers, karatekas, etc. The Gracie clan had chosen him to represent them because he was the one of the family who had the weakest corpulence. However, he dominated opponents much more imposing but who knew nothing about groundwork. In 2002, Carlos Gracie Jr., the son of Carlos Gracie founded the International Brazilian Jiu-Jitsu Federation (IBJJF). Based in Rio de Janeiro in Brazil, she is responsible for promoting this martial art worldwide. It is also the reference organization concerning the rules and the organization of international competitions, particularly the world championships (Spencer, 2016).

Brazilian Jiu Jitsu in the United States

During the 1970s BJJ made its way to the United States, first with Carley Gracie teaching the fighting style in Quantico, Virginia at a Marine Corps base. Later, Rorion and Reylson Gracie would travel to the United States and start teaching.

The sport took off after the tremendous success of the Ultimate Fighting Championship. The UFC's promotion of BJJ was no accident, as Rorion Gracie co-founded the project! Rorion

recognized that his sport only needed visibility and believed (correctly) that BJJ would dominate traditional martial arts under the newly created mixed martial arts rules. Instead of choosing the most physically imposing fighter of the Gracie family, the leaner Royce Gracie was chosen to represent the fighting style. Despite his smaller size, Royce soundly defeated his first string of challengers, creating a myth of the invincibility of Brazilian Jiu Jitsu in MMA.

Like other martial arts including Judo and Karate, BJJ adopts a system of colored belts to mark the progress of followers. This system generally varies according to the age of the follower. Thus, children under the age of 16 go through different belts: White, then grey, yellow, orange, green, and finally blue with 4 bars on each belt that marks the progression. New adult practitioners start with the white belt. Afterward, they move on to the blue, purple, brown, and black belt with the same intermediate grade system which is 4 bars. From the black belt, the practitioner can go up in rank until obtaining the red and black belt and the red and white belt (9th degree). The red belt (10th degree) is generally reserved for BJJ pioneers.

The more you wriggle in a disorganized way, the more the animal gains useful space and strength, until it reaches absolute domination. It is spoken deliberately of the aggressor and not of the adversary, because like every martial discipline it was born to be put into practice to defend one's safety. Of course, the desire to confront each other to prove themselves has led to the birth of tournaments of all kinds. Each with specific regulations that slowly, have distorted the martial art itself, making it become a combat sport.

Summary

Brazilian Jiu Jitsu is a martial art derived from Judo and classic Ju-Jitsu. It was developed in Brazil by the Gracie family for a hundred years. The JJB knew a great development thanks to its techniques' effectiveness and its combat strategy. The experiences of BJJ athletes and the impact on personal resilience was examined utilizing the methods listed in the chapter that follows.

Chapter III: Methods

BJJ & Resilience

The purpose of this study is to examine BJJ as a potential positive atmosphere to develop resilience. This study will focus solely on BJJ professors/coaches and their athletes. Particular attention will be paid to how the lessons and participation of BJJ inhibit the trainable aspects of the Army's resilience program. This study has the potential to reveal if the martial art of BJJ develops resilience. Although the qualitative approach used does not lend itself to generalization to the entirety of sport, Additionally, the qualitative interviews can provide more in-depth analysis of the strategies or benefits of these specific behaviors

Brazilian Jiu Jitsu is a martial art derived from Judo and classic Ju-Jitsu. It was developed in Brazil by the Gracie family for a hundred years. The JJB knew a great development thanks to its techniques' effectiveness and its combat strategy. The experiences of BJJ athletes and the impact on personal resilience will be examined.

Research Questions

With specific regard to BJJ professors/coaches and athletes, this study seeks to address the following question:

1. What are the experiences BJJ athletes with holistic training, discipline, and resilience What are the experiences of BJJ athletes as it relates to the six trainable aspects of Army resilience?

Research Design and Approach:

Qualitative methods enabled me to explore the ways in which athletes could potentially develop resilience. Qualitative methods represented the best choice for this research study because these methods allowed for exploration both in the intentions and perceptions of all participants' as well as their feelings toward and perceptions within the martial art. Qualitative methods provided the flexibility to investigate each individual's experiences in depth while enabling the participants to share their experiences in their own words.

The study will be situated within a social constructionist paradigm. This paradigm maintains that there is no single truth but, rather, individuals construct their own truths through the "social processes and interactions in which people are constantly engaged with each other" (Burr, 2015, p. 5). Social constructionism plays a particular importance upon the use of language because, rather than viewing it as a passive entity, this paradigm asserts that "language has practical consequences for people that should be acknowledged" (Burr, 2015, p. 11).

In particular, general inductive analysis allowed me to explore the interdependence within the specific context of multiple BJJ athletes throughout the Pacific Northwest Region in

the United States of America. Interviews enabled me to uncover the ways in which participants view the martial art along with the intentions and perceptions of developing resilience. Recordings revealed how athletes convey their personal perspectives of BJJ and resilience.

Like all qualitative research, general inductive analysis involves interpretation of the data. The goal is to understand the perspectives of the participants and find themes and make claims that are true to the participants' own experiences.

Setting and Sample:

This analysis exists within the 5 BJJ athletes located in the Pacific Northwest Region of the United States aged 20 years to 38 years old. All five participants identified as male with experience level of a minimum of 2 years all the way to 10 years. Two participants identified as Pacific Islander, one participant identified as Black, another identified as White, and the last participants identified as Asian. All participants had at least one competition and the most experienced participant had 10 competitions. Four participants held a blue belt rank and one person had achieved a purple belt. Two other participants dropped out due to a scheduling conflict, and for the reason of not wanting to be recorded.

After obtaining IRB approval, participants were recruited through the researcher's existing relationships with the BJJ community at open mat events from four different schoolhouses. The study and its requirements were discussed with the professor/coach and athlete at each chosen schoolhouse. Space for questions and concerns was also allotted to each participant. After obtaining permission from the participants an informed consent was signed and interviews were tentatively scheduled via zoom.

Inclusion Criteria for Participants

Participants included five male BJJ athletes across four different schoolhouses located in the Pacific Northwest Region of the United States of America. Participants were aged 20 to 38 years old.

Interviews

One on one interviews were conducted to assess the experiences of the BJJ athletes. . As primary investigator, prior to the beginning to each interview, I discussed informed consent and answered any questions that participants have about the research and the study. The athlete was given the opportunity to choose their own pseudonym to be used in this study. Then the semi-structured interview began. Interviews lasted from 65 minutes to 75 minutes. All interviews were recorded and then transcribed. Pseudonyms were used within these transcripts and any identifying information was removed.

Interview Guide

A semi-structured interview guide was utilized based on the existing literature surrounding Army resilience and BJJ terminology. The interview guide allowed for flexibility within the interviews to probe for further discussion and follow ideas and perspectives presented by the participants (Savin-Baden & Major, 2013). As such, questions were open-ended to allow for and facilitate exploration and discussion (Savin-Baden & Major, 2013).

The interview guide for athletes' is included in Appendix A. For the BJJ athletes these questions are centered on the following broad topics: (1) how and why they got into the martial art, (2) self-awareness, (3) self-regulation, (4) optimism, (5) strengths of character, (6)

connection, (7) and how they have changed from originally starting BJJ and where they are now physically and mentally.

Data Analysis

Once the interviews were conducted and transcribed, a general inductive analysis was used to analyze the interview transcripts. The method of in vivo coding of data analysis was utilized as an iterative process in which data is read and coded repeatedly while comparing passages to those already coded to detect similarities or differences (Boeije, 2002).

Because there is always some level of interpretation within the findings of a qualitative study, it is important to note my positionality as the primary investigator. This refers to aspects of my background and past experiences that are relevant to the current study. Once the interviews were conducted and transcribed, constant comparative analysis was used to analyze the interview transcripts. Data was read and coded repeatedly to detect similarities and differences in order to discover patterns within the interviews.

Establishing Validity and Reliability

Due to the interpretive nature of qualitative research, it is imperative that qualitative researchers be self-reflective of their roles within and interpretations of the research and data (Creswell, 2015). It is necessary that such researchers demonstrate that their research is credible and valid. Because qualitative data has some level of interpretation it is important as primary investigator to constantly be mindful of my positionality within the spaces I work.

Limitations

Through convenience sampling the study was fully composed of males. The study offered no incentive other than to be a part of a research study. Some participants dropped out due to scheduling and privacy issues of recording.

Chapter IV: Results & Discussion

The purpose of this study was to examine the experiences of athlete participation in BJJ and the impact on personal resilience. After interviewing five different participants, four main themes were found to be reoccurring amongst participants. A goal of the Army resilience program (MRT) is to build upon positive emotions in which all five participants reported BJJ impacts. Addressing another goal of MRT, all five participants reported having more ability to think effectively by developing cognitive flexibility. Each participant stated that they had learned skills through BJJ that have translated into either their personal or professional lives. Lastly, four participants described that BJJ felt like an all-inclusive safe environment. Each theme is presented within a general inductive analysis framework and data pieces from each interview.

Participant Profiles

Bryce identifies as a 36-year-old pacific islander father of three. He is a blue belt level BJJ athlete and has been training just over two years. I met Bryce at an open mat and immediately notices the charisma he brought into the schoolhouse. He constantly is rolling around with a big smile on his face. He was more than eager to participate in the study and provided in-depth answers to all my questions. Overall, I felt great about the interview with Bryce as he gave an insightful perspective into resilience and BJJ. Bryce got into the sport so that he could set a good example for his kids that it is ok to lose and bounce back from adversity.

Christopher identifies himself as a 20-year-old white male blue belt. On a Sunday morning at 10:00 AM I first see Chris coming onto the mats with a very shy, and subtle tone.

After a few rolls I ask Christopher if he would like to spar. We both roll for a six-minute round and in the down time talk about my study. I learn quickly he is not the shy, subtle person I observed, and he is incredibly talented at BJJ. He explains this comes from his competitive athletic nature that was a part of his upbringings. Christopher got into the sport because he said it is difficult to find competitive sports/activities as he gets older. BJJ has been an open community for him to continuously learn.

Carter identifies as a 28-year-old Asian male. He has been active in BJJ for over 10 years even though he still a blue belt. Carter was composed and quiet when we first met on the mats and he actually sat out when I asked him to originally roll. After taking a few rounds off to regain some energy he came up and approached me and asked if I wanted to roll. I said absolutely and he was incredibly technical in his skill set. Carter in my opinion should probably be a brown belt approaching his black belt. After the roll I told him a bit about my study and he was pretty hesitant at first and said let me think about it. A few days later he shot me a text and said he would like to tell his story. Carter got into the sport due to be bullied as a young Asian male in California.

Neal identifies as a 37-year-old black male father of four. Neal came to a No-gi open mat which means he was not wearing a belt of any kind. When I eventually asked him his experience level, he told me he was a blue belt but had been rolling for over 10 years. Neal is an individual that lights up the entire room with his energy. He boosts morale constantly by yelling motivational affirmations to participants and encourages everyone to keep pushing. Neal's interview could have gone on for a full day but I tried to keep him to 90 minutes. There were times where I would deliberately need to pace us to keep the interview on track. Neal grew up a striker in other martial arts and was a hard skeptic of BJJ. Once he got beat in a tournament he

came into the sport as a non-believer and has absolutely embraced the physical as well as mental development BJJ has given him.

Kaleb identifies as a 38-year-old pacific islander father of three. Kaleb is a purple belt and has about five years' experience on the mats. Kaleb is originally from Hawaii and got into the sport to do something physical as well as establish a community outside of the island. Interviewing Kaleb, I could feel a great sense of pride in all the words he spoke.

Themes

I outlined the emerging themes related to each individual interview and interactions. After coding the data through MAXQDA software, I then identified reoccurring trends popping up within the data across all five participants. These themes will touch on resilience, psychology, and the participation in BJJ.

Theme 1: BJJ Skills Develop Positive Emotions

As mentioned before, Scientific studies have shown that physical exercise voluntarily, at moderate intensities, with pleasurable activities, improves mood, cognition, anxiety, and quality of life in healthy individuals. The MRT program promotes the trainable competency of optimism in which students learn to build upon positive emotions daily. Motivation to train for each participant in the study was individual. This taps into the core competency of self-regulation within MRT. Part of promoting optimism is identifying your own thoughts and beliefs which falls under the MRT core competency of self-awareness.

Christopher started training BJJ because he had always felt the emotion of competitiveness. Sports became less of an option with getting older and having new responsibilities, so he became sedentary and incredibly frustrated with life. It was not until a

friend convinced him one day to show up on the mats that he felt the need to consistently show up for training.

Christopher: “The sport is an absolute blast. Even when I am suffering in a choke or submission I am constantly learning mentally, and physically. The whole time it’s a blast but it’s still a suck however rather than focus in on the suck I constantly think how it’s going to benefit me and how I can take something away from this. I’ve also learned to tone down my competitiveness and aggression which come natural to me to more productive emotions like pure joy”.

Bryce’s motivation to train came from seeing his kids get involved in the sport. He has a big smile on his face anytime he is rolling in BJJ and creates a positive atmosphere in the schoolhouse in almost all his interactions.

Bryce: “I saw my kids learn and grow on the mats and I knew I wanted to do something with them. I saw them become more confident almost instantly. Dude, a little kid can become so confident so quickly and this is something I can do with my kids, how could I not sign up? I continue to set an example for my kids, especially this last competition. My son had never lost before, and I saw him lose. Plain and simple he was not a good loser. I knew in the back of my mind that if I trained, I would eventually lose and show that hey man even dad loses... and look Dad is still smiling and Dad is still improving. I took a whole new approach of new people new faces new learning experience. Step on the mats and be yourself. One step at a time.”

When Bryce told me that he wakes up at 4:30 AM to train each morning I asked him how he constantly shows up to train with other life stressors, a busy schedule, and a full-time job. His response went back into positive emotion. “Dude like it’s hard to explain. It’s a community. I rolled this am with a bunch of guys and you know early bird gets the worm, right? Just

surrounding yourself with folks that want to get that done first thing in the morning just feels good. I set myself up to is surrounding yourself with excellence you become excellent.”

Carter was urged by others to get into the sport because he was being bullied. He says now “my experience has been great, and I love the community. It has really helped with stress inoculation. Before that, I was the only Asian in my school and I Was constantly trying to fit into other communities. I was never accepted because I was either too light or too dark. My parents were always gone so one day I went to the bathroom with a scapula to cut my eyes wide open. I didn’t want to be Asian anymore. Luckily my grandmother came in and took it away before I could do anything. Right around this time a mentor took me to a BJJ facility. BJJ taught me to stand up for myself in a controlled manner. I can be passive now and know in my heart that I’m dangerous and aggressive. I train with this in mind and think how thankful I am to be training with friends.”

Neal thanked me numerous times before the interview even began for the fact that he could contribute to this study. He describes his experience in BJJ as “consistent failures that have taught him lessons in physical and mental wellness”. Being in the medical community he wanted to know how to defend himself against aggressive or unruly patients with non-lethal controlled tactics for self-defense. “There’s a saying I like that says perpetual optimism is moving from loss to loss or failure to failure without a loss of enthusiasm is the definition of success. My success is that I’ve lost more times than you’ve had chances to try and I’m grateful for each experience. Win lose or draw we are all grateful for the interaction.” Neal also expressed the importance of journaling your thoughts post training and re-shaping those experiences to the emotion of gratitude.

Kaleb started training. Kaleb responded “I needed something to deal with the stress of my job. I had heard a little bit about the community and someone finally after a lot of conversations convinced me to show up. It took a lot for me to finally walk into those doors because I had little free time. Most of that free time was not so productive anyway though.” Kaleb told me a bit about his unhealthy habits such as drinking too much for no given reason other than getting through the day. He explained to me that he does not need that in his life anymore.

Kaleb in describing his BJJ experience thus far “Literally it has been an emotional rollercoaster, I mean I bawled my eyes out of joy when I got my first promotion. Another time I was down bad just had a great team pushing me to see the brighter side of things. They let me see a comeback from a few setbacks and get out of my negative mindset. If work is pissing me off or something in my personal life is going on, I’m always able to separate myself from those things when it comes to training. I just make myself completely present and those on the mats appreciate that dude, so I owe it to my training partners to be my best.”

Theme 2: BJJ Skills Develop Cognitive Flexibility

When interviewing participants about the MRT core competency of mental agility, participants expressed a large emphasis on the importance of thinking flexibly. There was also some spill over into the core competencies of self-awareness and self-regulation.

For whatever reason many metaphors were used on this competency specifically. In fact, four out of five participants described BJJ as a “chess game” in which you are constantly planning your next move and being tactful with your problem-solving decisions. Neal’s description was getting after the same principle but instead described as “a living breathing puzzle. BJJ is the rubix cube that does not want to be solved. First you need to identify your own obstacles, your knowledge gaps, and then maybe you can master two to three of these things.

That leaves another seven or eight things that are parts of the game that you might not be proficient in but need to know. Then in really thinking flexibly I need to adopt a mindset of how I achieve this move on someone who doesn't want it done to them."

Christopher and Brice both mentioned how they have needed to be flexible around the emotion of aggression. Both participants are used to bringing that intensity to other activities in their life such as power lifting or high school sports. Christopher states "I can't meet aggression with aggression. I need to slow things down and look at a thing with more of a philosophical standpoint. This helps me to improve things that I am not so good at rather than building on things I'm already doing well." Bryce states "if I keep trying the same move over and over again, I am not thinking flexibly and I get smashed. I need to be moving like a chess piece" Bryce in describing if he feels as if too much anger, aggression or negative thoughts are coming on "I gather my thoughts, take a deep breath and be completely present. I take a mental break and start eating that cow one bite at a time and then it's back to problem solving."

Kaleb stated that "BJJ encourages strength and release. It allows the practitioner to decide if the demand meets the supply. You got to push to a certain limit and then you get a check point of a conscious effort of what's more important to rest, or rethink and push. You get multiple attempts to self-regulate throughout fights. It's a physical modality that another person is reacting to. So, you got to think about what your best option is. The tank only has so much in it."

Theme 3: BJJ Skills Transition into Personal/Professional Life

All five participants in the study expressed that BJJ has helped them in their personal and professional lives. Three of five stated that BJJ has helped them boost their confidence which has transitioned over to them being able to publicly speak. Two other participants stated that BJJ has

improved their ability to parent their children and become better fathers. This relates directly to the strengths of character competency of resilience.

Christopher: “BJJ has taught me to never give up, never quit and just keep getting after it. I would rather live with the regret of I have failed rather than never trying. Even if it sucks in whatever situation you got to just keep pressing on. I will say if you have been going to the BJJ gym every day for over a year and those people aren’t your best friends, you need to find a new gym. They have pushed me to be in the best shape physically and mentally of my life. Even if I have a rough day at work, I push myself to roll at the end of the day”

Carter states “I have learned to control my heart rate and breathing which has transitioned to public speaking. I’m now constantly thinking on how I need to focus on what is most important right now and how can I get better at it. I’ve never been the strongest, but I will always show up to do the work. That translates over because shit happens all the time and it’s just another day. I am resilient because of BJJ.”

Bryce “If you’re not self-aware when you first get on the mats you will really quickly learn you need to be self-aware because you will be humbled. Practicing humility is huge and learning I am not the best guy here and I am here to learn. The spill over has happened in my career where I’ve excelled in my career and ascended to a place where some folks are not self-aware or humble... I have remained grounded that I can still take what I learn and be receptive to constantly growing. I am not untouchable. When I got hired, they told me it’s because of my character which is the same character and confidence I bring and develop on the mats. BJJ Can be super intimidating, but everyone is there to become a better person and build relationships. Lastly, I’m not good at public speaking. I’ve been able to gain confidence through BJJ and its spilt over to other areas of my life. It just makes me a better person plain and simple.”

Neal commented on how he has changed as a person through BJJ. “I’ll be honest I was a non-believer. An absolute skeptic. I didn’t think it was valuable as the skills I had already learned practicing. Like most individuals I was humbled. I learned to be a good loser. I was not previously. Through practicing and being willing to try and learn for the sake of learning the validation I got to be accepted into that community has been an absolute privilege. To see others, grow has given me the validation of one of the most single fulfilling things in my life. It has changed the trajectory of my life to be the individual I wanted to be but didn’t have the formal training in my formative years where someone would tell me its ok. Through training with others, I found elements that tied into every aspect of my life. It’s not perfect but it also doesn’t have to be. It is a medium where I can talk about any huge list of things to become more relatable to my student population. What you have the potential to give in the space you have to provide so that someone can come out and develop connection where maybe they didn’t know they could get into, is profound. I had no idea this was going to be more than a self-defense tactic, but it changed the way I parent my children, the husband I am to a space, the way I coach, conduct myself with workers, and changed my way of how I look at support. It advanced into something a position that doesn’t really exist.”

Theme 4: BJJ Creates an Inclusive Safe Environment

Bryce said something allowed and then corrected himself. “I think you have to be physically fit... fuck that, I don’t agree with that. Anyone can get on the mats it’s a safe place. Its way more mental for me. The hardest part of jiu-jitsu is day one because you feel like everyone is watching you. It takes confidence and maturity to stay on the mats. But we take everyone, athlete, non-athlete, boy, girl, trans, gamer, librarian, black, white, native... whatever! And once you’re part of the community its strong man”

Neal “We have people who come from broken homes, we have people who come from no homes. This sport allows for an adoption of brilliance connection. It breaks the stereotypical mold of therapy that my community is not comfortable with. If you go to the gym, you might have one gym buddy, but in one day of BJJ you might have 12 different partners of all communities. It does not discriminate against age, gender, race. The mats are truly universally foundationally safe for individuals to practice and utilize what they are given. It enhances the human experience more than anything. It promotes mentorship and coaching which we just don’t have in everyday life. We have 5-year-old, and we have 80-year-old. I can also get on a group of mats in Guam even if we don’t speak the language and still have universal connection. We have the ability to make ourselves the best version of ourselves”

Chapter V: Discussion

Summary of results

Within this study, as the primary investigator I sought out to interview BJJ athletes, and their experiences based in a theoretical framework of resilience. I collected data from five different participants through interviews via zoom and in person. I then used general inductive analysis to code themes that emerged across the participant data pool. The five themes that emerged represent the participants.

Conclusions

The findings speak to the importance of exercise, in this particular case BJJ, providing not just physical benefits but also allowing for self-development in the psychological aspect of resilience. A relationship exists between participation in the sport and cross-over into taking the

skills learned on the mat into everyday life. Also, pending the right circumstances and environment, BJJ provides an opportunity to gain mental aspects of resilience through training.

Recommendations

Stated in my positionality, I am active as a practitioner in the field of sport and performance psychology. Having that background has allowed for myself to make numerous recommendations that emerged from the study. Specifically, there are practical recommendations for sport psychology practitioners, athletes or those that are entertaining the idea of training BJJ, and coaches/professors of BJJ. It is my belief that through BJJ performance enhancement in the sport is not the most crucial progression in the sport but instead self-development of the human with a specific emphasis on resilience.

Sport Psychology Practitioners

The United States Army is currently the largest employer of those in the field of sport psychology. Within that field, the major deliverable is the MRT program which as discussed before takes place in a classroom setting. I do see a massive value in the skill however I believe that what is learned in the classroom does not always translate to back at the unit. In general, many sport psychology practitioners have a private practice, or operate workshops in which they teach performance enhancement skills. After conducting and coding these interviews, I have found much more of a need to be more embedded in the actual performances that as practitioners we are trying to improve. Put simply, my belief is that sport psychology practitioners need to start getting out of the office, and getting more involved in performance embedment.

An example of this is getting more involved in practice observations and providing effective hip-pocket training as well as coaching feedback. If an individual is making strides in

the sport performance atmosphere, it is likely that they are unaware without a following conversation of the actual improvements they are making. A sport like BJJ, you quickly learn how to adapt to the skill level and make amazing physical gainful experiences, but where is the feedback? This is where sport psychology practitioners can give credit when it is due. In sport psychology, practitioners are trained in recognizing the aspects of resilience, and can provide feedback on how to maintain those mental aspects and apply them to everyday life situations.

These mental aspects are not secluded to BJJ. Many sports as well as activities such as soccer, basketball, hiking, any recreational activity can provide therapeutic relief. There is also many aspects of employment that also push individuals past their comfort zone and into a state of mental resilience. The fact is, an effective sport psychology practitioner can do some of the work from an office or classroom, but not all the work. Much of the work must be done through observation, taking notes, providing feedback, and getting into the experience as much as they feel they can while maintaining professionalism. I do have quite a bias here, as my new job is completely embedded within a special operations unit, and I did not know what it was like being this involved not too long ago. I now have the opportunity to view and sometimes participate in the majority of trainings that I provide mental training for. Part of resilience and pushing ourselves beyond our comfort zone is gaining more insight into these experiences, and in a practice what we preach mentality, in order for us to grow as sport psychology practitioners is getting more involved with the performance.

BJJ Athletes and Potential Athletes

If you are an athlete of BJJ, I commend you because you have already taken what I consider to be the hardest step. Embracing a growth mindset and walking through the doors of a schoolhouse where the skill level can range from complete novice to expert. The inside of a

schoolhouse can be incredibly intimidating, and I for one can assure you it took not days, or weeks, but months of convincing myself to finally walk into the doors.

I do think about my positionality and how I suffered many years as a teenager with tremendous anxiety. It would have taken a mass amount of convincing and persuasion to get me to walk through the doors of a schoolhouse back then, but if I had, I could tell you it would have benefited my mental health greatly. Through this study we have learned that athletes have learned mental resilience and overcome some hardships/trauma by getting involved in BJJ. The outlet provided by BJJ could provide an outlet for providing coping mechanisms to those that participate.

There is limitation with BJJ in terms of being offered to everyone. The sport is not cheap. I have seen gym prices range from seventy dollars to two hundred dollars a month for memberships. I do however notice many local YMCA's offering martial arts and sports that also promote growth. I would push those same services to attempt at offering BJJ classes.

BJJ Coaches/Professors

Effective Praise research comes from Carol Dweck in her theory of Growth/Fixed mindset. The skill is part of the MRT curriculum and can be applied almost immediately. The skill focuses in on praising effort as the key to mastery and using specific language to name the effort that allowed for specific performance. I believe BJJ Coaches/Professors could provide more effective praise on the developmental aspects of athletes in the sport. The route of applying it to physical skills would have a low learning curve as their expertise would allow them to make comments on changes and transitions made in the athlete's performance. In my opinion the harder aspect would be giving effective praise to an individual by finding out they are carrying

their skills learned in BJJ and translating them to their everyday life. This could come in the form of working with a sport psychology practitioner, getting trained in sport psychology tactics, or having a sport psychology practitioner do practice/tournament observations and provide feedback to that coach. I believe hearing this type of praise come from an all-encompassing figure such as a coach really promotes the personal growth of the individual athlete. With this addition to training, athletes develop not just physically but can make more strides in becoming holistic humans, and ensuring they are gaining mental resilience through training.

Lastly, from this study in particular and from general observation the male to female population ratio is noticeable. If professors and coaches are allowed to provide a more cohesive environment for females, then the population could increase. The two females I asked to be a part of the study unfortunately denied access due to confidentiality. Providing more access to female classes as well as promoting access to all genders would allow for more access to facilities as well as a cohesive all-inclusive environment.

To conclude, I present a quote by a coach in which I spoke with at one of the open mats: “You don’t just show up to an open mat on a Sunday morning because you want to. You are pushing yourself to get here and be uncomfortable. We are going to work... and work hard! All these folks are strong as hell, and I wish I could just get them to realize that they are way stronger in their minds than they are probably aware of. That’s the dream. To get them to realize the big picture. If you can show up here Sunday morning... I mean shit... what can’t they accomplish?”

Potentially, in the future scholarships can be offered to populations that cannot afford or have access to BJJ. Once again coming from my positionality standpoint, I have had so many

personal benefits from BJJ including dealing with anxiety, and trauma that I see this martial art being an excellent resource to be used as a coping mechanism for teenagers that dealt with similar aspects. Inner City Weightlifting is a program based in Boston that offers recreational activity in an effort to decrease gang activity in the area. Throughout the country there are multiple programs that have a similar focus. If scholarships are offered through BJJ, there could be a wider spread of BJJ having growth within populations that are less often to seek out or receive BJJ training.

Conclusion

This study attempted to record the experiences of five male athletes who participated in BJJ and its impact on resilience. The participants' words in this study suggest anecdotally that BJJ can promote specific aspects of resilience such as developing positive emotions, learning ways to think more flexibly, self-development of character strengths, and a community that encourages connection. It is the researcher's hope with the results of the study and the future of BJJ rapidly growing, continued research in the subject of psychological benefits such as resilience in combination with the physical exertion BJJ provides be worthwhile for continued research.

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Appendix A

Research Participant Information and Consent Form

TITLE OF STUDY: Developing Mental Resilience Through Brazilian JiuJitsu

PRINCIPLE INVESTIGATOR: Brendan Hanley, doctoral student, University of Washington, Tacoma

COMMITTEE: Dr. Billye Sankofa Waters, Dr. Robin Minthorn (Co-Chair), Nate Wolch (Co-Chair)

DESCRIPTION OF RESEARCH

You are invited to participate in a research study about the development of resilience through the practice of Brazilian JiuJitsu. The goal of this study is to gain insight into the mental aspects gained through the martial art as it relates to the United States Army's definition of resilience. The insights gained from your perspective will be used to shape a more expansive research project.

This qualitative study will be conducted with one-on-one interviews lasting approximately sixty minutes. With your permission, the interview will be recorded in order to ensure accuracy. I will utilize a non-affiliated transcription service and will ask participants to review their transcripts for accuracy and revisions. Both audio recordings and transcripts will be kept in a password protected file for three years and then destroyed. Data may be used in publications, conference presentations, or future research projects.

If you participate in this study, I would like to be able to quote you directly without using your name. If you agree to allow us to quote you in publications, please type or sign your initials at the statement at the bottom of this form. If you are unable to complete this form digitally, consent may be provided verbally at the beginning of the Zoom session.

WHAT WILL MY PARTICIPATION INVOLVE?

Your participation is completely voluntary. You have the right to withdraw at any time during the study. Participating in the study will include a one-on-one interview lasting approximately sixty minutes. You will be given the interview questions ahead of time and you may skip any question you wish not to answer. If you wish to redact any piece of your interview, please contact me and I will delete the section(s) from the transcript.

ARE THERE ANY RISKS TO ME?

This study poses minimal confidentiality risks. With a very small sample size, it is possible participants could be identifiable based on their responses. Risks will be minimized by not disclosing the location of the study and using pseudonyms in the data, analysis, and any publication to protect the confidentiality of the participants.

HOW WILL MY CONFIDENTIALITY BE PROTECTED?

To ensure confidentiality, only I, the interviewer, will know the identity of the participants. I will use pseudonyms in the data, analysis, and any publication to protect the confidentiality of the participants. All written notes and computer transcriptions will be coded, and I will include password protection on documents that have participant data. All data will be destroyed after three years for publication purposes and future research.

WHOM SHOULD I CONTACT IF I HAVE QUESTIONS?

Upon the completion of the study, I will be happy to discuss the findings with you if you request to do so. If you are not satisfied with response of the research team, have more questions, or want to talk with someone about your rights as a research participant, you may contact the University of Washington Human Subjects Division – Team D at hsdteam@uw.edu The Human Subjects Division is a group of people that reviews research studies and protects the rights of people involved in research.

Sincerely,

DIGITAL SIGNATURE – BRENDAN HANLEY

Doctoral Student

College of Education

Phone: 508-740-6084

Email: bha155@uw.edu



University of Washington, Tacoma

College of Education
Educational Leadership Ed.D.

Consent Signature Form

Your signature indicates that you have read this consent form, had an opportunity to ask any questions about your participation in this research, and voluntarily consent to participate. You will receive a copy of this form for your records.

_____ I give permission for the interview to be recorded for transcription purposes.

_____ I give permission to be quoted directly in publications without using my name.

Name of Participant (please print or type): _____

Signature (or digital): _____ Date: _____

Appendix B

University of Washington, Tacoma College of Education
Education Leadership Ed.D.

INTERVIEW PROTOCOL

Researcher begins each interview with introduction, positionality, and interview procedures.

Background Questions

1. Please tell me a little bit about yourself. Feel free to share as much or as little as you are comfortable with. Ex: Gender, Age, Status, Anything else you would like to include.

BJJ Experience

1. When did you first start BJJ and how long have you been training/instructing?
2. What was your original reason for starting training? Why do you continue to train?
3. What rank belt are you?
4. Do you have any competition history?
5. How would you describe your BJJ experience?
6. How much of BJJ do you think is mental? How much of BJJ do you think is physical?

Resilience

1. What is your personal definition of resilience?
2. Self-awareness is defined as the ability to identify your own thoughts, emotions and behaviors.
By being self-aware you know how to develop your personal skills, are aware of your strengths and weaknesses and how to improve them.

How do you think BJJ impacts or this?
3. Self-regulation is defined as being able to regulate your thoughts, actions, and emotions. Self-regulation helps you as you know how to control yourself and know when to stop. You know how to regulate your needs and you can control yourself better.

How do you think BJJ impacts this?
4. Optimism is defined as being able to remain realistic and maintain hope even when things seem to be going wrong. You have confidence in yourself and believe that you can do it. Having Optimism means that you can stay happy and positive and encourage others to be faithful and be cheerful.

How do you think BJJ impacts this?

5. Mental Agility is defined as the ability to think flexibly and take in other perspectives and views on adversities.
Having Mental Agility enables you to 'think outside the box' and try new things. You can realize how to fix problems and can fix them in different ways.

How do you think BJJ impacts this?

6. Strengths of character is defined as having the knowledge of your top character strengths and knowing how to use them. You believe in the strengths that you have and use them to the best of your abilities.
By having Strengths of Character, you can use your strengths to help yourself and others grow as a person.

How do you think BJJ impacts this?

7. Connection is defined having strong relationships, supporting others, and having positive and effective communication skills.
By having Connection, you can easily communicate with people and you know how to help people feel better and support them

How do you think BJJ impacts this?

Personal Changes

1. How are you different today than the original person who day one walked into the BJJ facility?